

Notice of Allowability	Application No.	Applicant(s)
	10/050,346	GAO ET AL.
	Examiner	Art Unit
	Yaritza Guadalupe McCall	2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to Amendment filed December 9, 2004.
2. The allowed claim(s) is/are 1-4,6-9 and 21-24.
3. The drawings filed on 15 January 2002 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/29/03
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

In response to Amendment filed October 6, 2004

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Terry McHugh on December 21, 2004.

The application has been amended as follows:

- a. Please cancel claims 10 – 20

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

- a. Claims 1 - 4 and 6 – 9 are allowable over the Prior Art of Record because it fails to teach or suggest a method of classifying media comprising the step of generating an input – output system including mapping each said sample in a multi-dimensional data distribution to form a cluster-weighted model (CWM) in which joint probability densities established by said mapping are used to define probability clusters within said data distribution in combination with the remaining limitations of the claims.
- b. Claim 21 is allowable over the Prior Art of Record because it fails to teach or suggest a method of performing media classification with respect to a plurality of different media classes comprising the step of generating an input – output system including utilizing cluster-weighted modeling in implementing said probabilistic input-output system so as to define clusters which are subsets of data space according to domains of influence in combination with the remaining limitations of the claims.
- c. Claims 22 - 24 are allowable over the Prior Art of Record because it fails to teach or suggest a method of classifying a medium of interest with respect to a plurality of different media classes, the medium having surface textural features that are inherent to the medium, the method comprising the step of using a cluster-weighted input-output model to discriminate the medium against the media classes on a basis of matching said statistics to clusters which are subsets of data space according to domains of influence, including using said statistics as input parameters to the model, said discrimination of

said medium having a joint probability density dependency on said statistics in combination with the remaining limitations of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe McCall whose telephone number is (571)272-2244. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yaritza Guadalupe McCall
Patent Examiner
Art Unit 2859
December 21, 2004



CHRISTOPHER W. FULTON
PRIMARY EXAMINER